



# SELLS



**Society for Effective Lessons Learned Sharing**

## **General Employee Training on Lessons Learned**

Prepared by the Society for Effective  
Lessons Learned Sharing (SELLS)

# Why do we need a lessons learned program?

Because..

- Workers perform tasks with associated risks
- They have considered all the angles
- They have performed the task many times
- They do what has become a natural habit
- They know what they are doing
- Nothing can go wrong
- ... and yet they get hurt at work



# Objectives

To understand:

- What is a lessons learned
- Where to find lessons learned
- Why to use lessons learned
- Who uses lessons learned
- How to share lessons learned
- What resources are available



# Definition of a Lessons Learned

A feedback and improvement tool used to improve work performance with the objective of doing work safely and efficiently. Specifically, a lessons learned is:

- A **good work practice** or innovative approach that is captured and shared to promote repeat applications,
- or
- An **adverse work practice** or experience that is captured and shared to avoid a recurrence

**Good work practice – using gloves when cutting heavy materials**



**Adverse work practice – running over own foot with a lawnmower**

# Where to Find Lessons Learned

- Personal experiences
- Field activities
- Assessments, audits, and appraisals
- Safety meetings
- Quality council meetings
- Nonconformance reports
- Occurrence reports
- Training evaluations
- Safety bulletins
- Operational Readiness Reviews
- Project planning and evaluation results
- Performance improvement initiatives



KC-135 Aircraft pressurization: a civilian technician who, "had always done it that way," was **using a homemade gauge and no procedure.**



# Number One Reason to Share Lessons Learned

- **Safety** of our workers
- We are at risk if we don't inform our workers of hazards we know about
- We don't want to add any more names to the worker fatality list:
  - June 93 Lou Beatty died in Hanford U-3 Steam Pit
  - Feb 97 Ronald Wade died from ORNL K-25 welding fire
  - Jul 98 Kerry Austin died at CO2-flooded facility at INEEL

An employee was edging his lawn wearing sunglasses. Something brushed his face and knocked the sunglasses off. He picked up the glasses, and was shocked to find that a screw had penetrated the sunglasses. **The screw was potentially fatal.**



# Other Reasons to Share Lessons Learned

- Retaining knowledge of aging workforce
- Maintaining corrective action plan effectiveness
- Reducing number of repeat incidents by learning from past experiences
- Identifying innovative ways to solve problems by sharing positive experiences, successes and strengths
- Promoting continuous safety, operational improvement, and cost savings

A slope stability analysis performed on a muckpile to identify possible stability hazards concluded that the slope could not be relied upon to support a drill rig. The slope stability **study proved to be correct** as the muckpile failed following a significant rain event.



# Reasons for Federal and Contractor Workers to Share Lessons Learned

- Use is required by a number of U.S. Department of Energy (DOE) Orders
- To address Defense Nuclear Facilities Safety Board (DNFSB) criticisms of DOE
- To reduce Price-Anderson Amendment Act (PAAA) liability
- To provide a mechanism for feedback and continuous improvement to meet Integrated Safety Management System objectives





# How Lessons Learned are Used

- Workers identify experiences, activities, processes, and practices that should be shared and send to the Lessons Learned Point of Contact
- Lessons Learned Point of Contact develops and submits lessons learned for distribution
- Subject Matter Experts review lessons learned for applicability
- Managers and workers review applicable lessons learned for implementation

Service Technician driving down a mountain lost control of the vehicle and ran it off the dirt road (~ 15-20 feet) into the trees. Damage to vehicle \$5,800. There were no injuries.

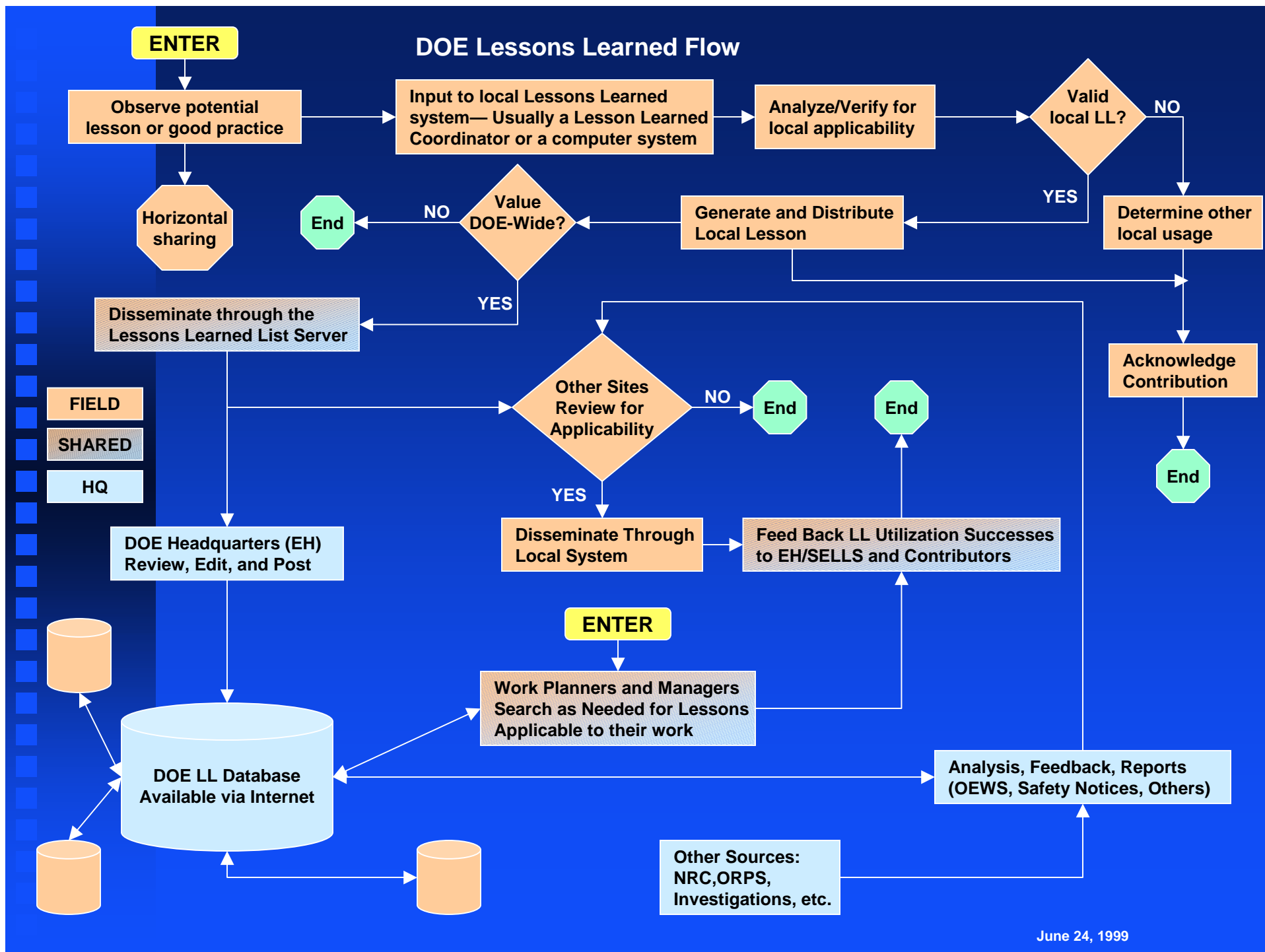


# How Lessons Learned are Used (continued)

- Work planners review historical lessons learned during work control document development
- Work planners incorporate applicable lessons learned information into planning documents
- Users provide feedback to Lessons Learned Point of Contact



A tank collapses as a result of drawing out of the tank when the vent valve was covered by a plastic bag to "protect" it during tank painting.



# Available Resources

- Lessons learned coordinator(s)
- DOE Lessons Learned Standard -  
<http://www.tis.eh.doe.gov/techstds/standard/std7501/std750199.pdf>
- Delivery systems
  - Internal
  - External
- Organizations
  - Society for Effective Lessons Learned Sharing (SELLS)

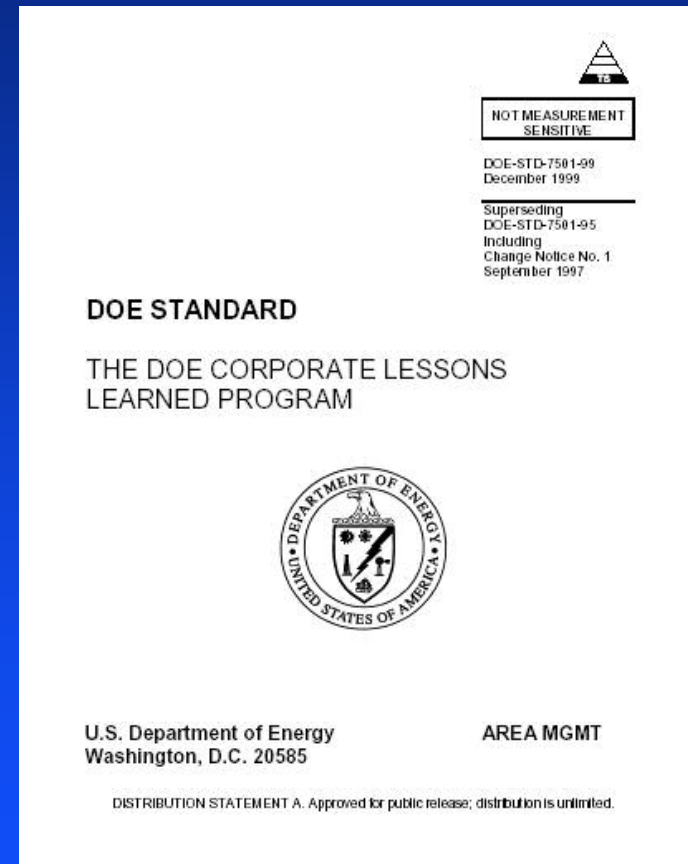
# Lessons Learned Coordinator(s)

- Add name, contact information, and photo of lessons learned coordinator(s)



# DOE Lessons Learned Standard

- **INFRASTRUCTURE ELEMENTS**
  - Roles and Responsibilities
  - Training and Qualification
  - Procedures and Documentation
- **LESSONS LEARNED DEVELOPMENT AND DISSEMINATION**
  - Identifying and Reviewing Sources of Potential Lessons Learned Information
  - Preparing Lesson Learned Documents
  - Disseminating Lessons Learned Information
- **UTILIZATION OF LESSONS LEARNED INFORMATION**
  - Using Lessons Learned Information
  - Ensuring Program Effectiveness
  - Archiving Lessons Learned Information
  - Feedback



# Lessons Learned Template Elements

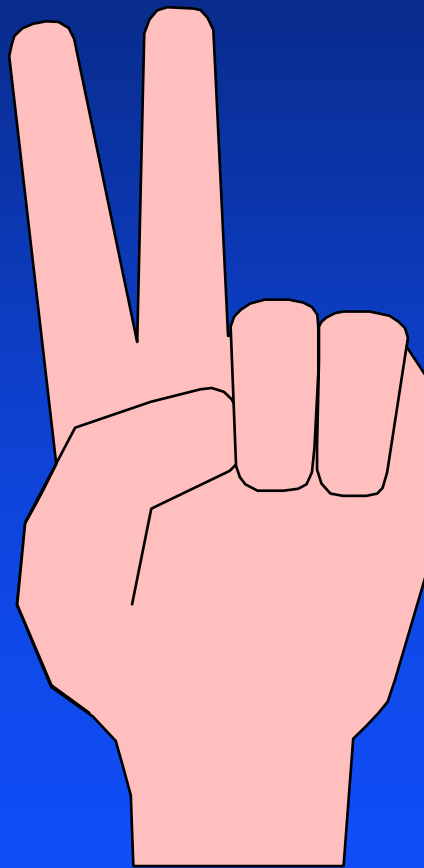
- Title
- Date
- Identifier
- Lessons Learned Statement
- Discussion of Activities
- Analysis
- Recommended Actions
- Estimated Savings/Cost Avoidance
- Priority Descriptor
- Work / Function(s)
- User-Defined Category
- Hazard(s)
- Integrated Safety Core Function(s)
- Originator
- Contact
- Derivative Classifier
- Reviewing Official
- References
- Review Option

**What would be the lessons learned statement for this incident?**

# Internal Delivery System

- Add description of organization's internal distribution system

# Two Methods of External Delivery



- Active (repository)
  - Easy access
  - Web enabled
- Passive (delivery)
  - Tailored distribution
  - Alerting mechanism

# Available External Delivery Systems

## ■ **Active**

- **National Nuclear Security Administration (NNSA) Lessons Learned Program E-Mail Push System:** Establish your preferences for receipt of lessons learned at: <http://lessons-learned.net>
- **DOE Lessons Learned Listserver at:** <http://hqinc.doe.gov/list/SellsListServer.nsf>

## ■ **Passive**

- **DOE Lessons Learned Web Site:** Access DOE lessons learned in a searchable database through the Internet at: <http://tis.eh.doe.gov/LL>
- **Environmental Management (EM) Lessons Learned Web Site:** Access lessons learned related to environmental management in a searchable database through the Internet at: <http://www.em.doe.gov/lessons>



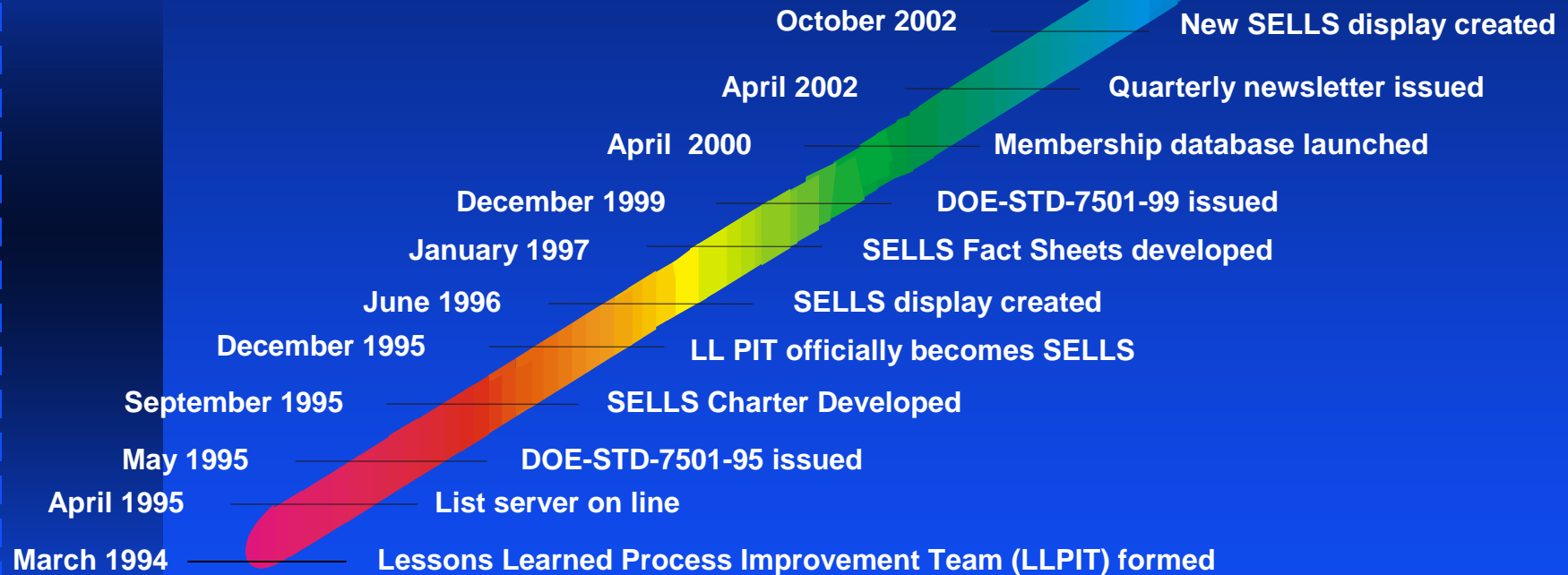
# SELLS

- Chartered by FM-1 in 1995
- Formed from Process Improvement Team
- Goal is to institutionalize sharing and using lessons learned
- Members: Lessons learned Coordinators, contractors, representatives from DOE/HQ, DOE/EH, DOE/EM, NNSA, others in DOE, others from various federal agencies, some businesses



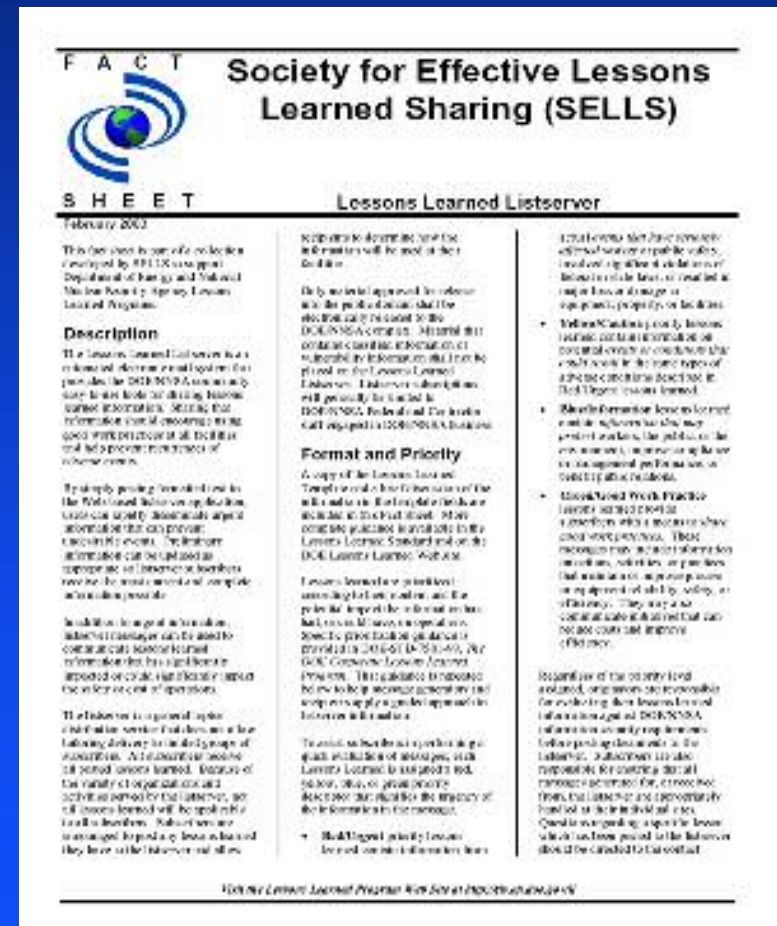
Members at October 2002  
SELLS Workshop

# Time Line of Significant SELLS Events



# SELLS Tools for Sharing Knowledge

- Lessons learned web site
  - <http://www.eh.doe.gov/ll/index.html>
- SELLS list server
- Bi-weekly conference calls
- Monthly mentoring
- Quarterly newsletter
- Semi-annual meetings



# Conclusion

- Lessons learned can be submitted by anyone in any organization
- Lessons learned can help everyone work safely, more efficiently, and more economically
- Have you shared a lesson today?

